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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,273	09/18/2000	Jean-Claude Constantin	TSW-32978	4537
116 7590 08/21/2008 PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108				
EXAMINER LAO, LUN S				
ART UNIT 2615		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

09/664,273

Applicant(s)

CONSTANTIN, JEAN-CLAUDE

Examiner

LUN-SEE LAO

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-45 is/are pending in the application.
- 4a) Of the above claim(s) 41-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No./Mail Date: _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Introduction

1. This action is in response to the amendment filed on 03-24-2008 and 05-08-2008. Claims 1-20 has been canceled and claims 21, 22, 25-26, 30-32, 35-36 and 40 have been amended and claims 41-45 have been added. Claims 21-45 have been pending.

2. Newly submitted claims 41-45 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: (A) an oscillator providing an oscillator frequency; (B) a synthesizer for generating a plurality of receiving frequencies by transforming the oscillator frequency to the plurality of receiving frequencies; and (C) a switch for activating an adjustment unit, which upon activation provide a scanning of a frequency band and (D) a unit for mounting on a hearing aid, and (E) a connection for detachably connecting to the hearing aid for transmission of a signal from the unit to the hearing aid.

3. Since applicant has received an action on the merits for the **originally presented invention**, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 41-45 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “a wireless transmission system comprising: a plurality of hearing devices, hearing device comprising a signal processing unit and an electro-acoustic transducer, the signal processing unit being operatively connected to the electro-acoustic transducer; means for transmitting a plurality of audio signals to the hearing devices, wherein each audio signal is transmitted at a predefined carrier frequency; each hearing device further comprising means for receiving at least one of the plurality of audio signals, said means for receiving at least one of the plurality of audio signals being operatively connected to at least one of the signal processing unit and the electro-acoustic transducer; means for remotely generating and wireless transmitting configuration parameters to the hearing devices, for configuring the means for receiving at least one of the plurality of audio signals; each hearing device further comprising means for receiving the configuration parameters, said means for receiving the configuration parameters being comprised in said means for receiving at least one of the plurality of audio signals; and each hearing device further comprising means for tuning the means for receiving at least one of the plurality of audio signals to an audio signal according to the configuration parameters, wherein the plurality of audio signals as well as the configuration parameters are transmitted wirelessly via independent transmission channels” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2615

6. Claims 21, 23, 25, 30-31, 33, 35, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US PAT. 5,721,783).

Consider claim 21 Anderson teaches a wireless transmission system comprising:
at least one hearing device comprising a signal processing unit and an electro-acoustic transducer (see fig.2), the signal processing unit being operatively connected to the electro-acoustic transducer;

means for transmitting a plurality of audio signals to the hearing device, wherein each audio signal is transmitted at a predefined carrier frequency (see fig.9);

each hearing device further comprising means for receiving at least one of the plurality of audio signals, said means for receiving at least one of the plurality of audio signals being operatively connected to at least one of the signal processing unit and the electro-acoustic transducer (see figs. 2 and 9);

means for remotely generating and wirelessly transmitting configuration parameters to the hearing devices for configuring the means for receiving at least one of the plurality of audio signals (948 in fig.9);

each hearing device further comprising means for receiving the configuration parameters, said means for receiving the configuration parameters being comprised in said means for receiving at least one of the plurality of audio signals (948 in fig.9); and

each hearing device further comprising means for tuning the means for receiving of at least one of the plurality of audio signals to an audio signal according to the configuration parameters (962, 904, 902 in fig.9);

wherein the plurality of audio signals as well as the configuration parameters are transmitted wirelessly via independent transmission channels (see figs 2 and 9 and col. 4 line 27-col. 5 line 60, col. 8 line 53-col. 9 line 67 and col. 12 line 47-col. 13 line 67); as claimed. But Anderson may not explicitly teach a plurality of hearing devices as claimed

However, providing more than one hearing device for a wireless transmission system is well known in the art (the examiner is taking the official notice).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to be motivated to provide a sound hearing device for the system taught by Anderson as an attenuate device, in order to enhance the efficiency of the communication system.

Consider claim 31 Anderson teaches a wireless transmission system comprising:
at least one hearing device comprising a signal processing unit and an electro-acoustic transducer (see fig.2), the signal processing unit being operatively connected to the electro-acoustic transducer (see fig.2);

means for transmitting a plurality of audio signals to the hearing device, wherein each audio signal is transmitted at a predefined carrier frequency (see fig.9) ;

means for receiving at least one of the plurality of audio signals, said means for receiving at least one of the plurality of audio signals being detachably (reads on the switch) coupled to the at least one hearing device (see figs 2 and 9), and

said means for receiving at least one of the plurality of audio signals being operatively connected to at least one of the signal processing unit and the electro-acoustic transducer (see figs 2 and 9);

means for remotely generating and wirelessly transmitting configuration parameters to the hearing devices for configuring the means for receiving at least one of the plurality of audio signals (948 in fig.9);

each hearing device further comprising means for receiving the configuration parameters, said means for receiving the configuration parameters being comprised in said means for receiving at least one of the plurality of audio signals (948 in fig.9); and

each hearing device further comprising means for tuning the means for receiving least one of the plurality of audio signals to an audio signal according to the configuration parameters (962, 904, 902 in fig.9);

wherein the plurality of audio signals as well as the configuration parameters are transmitted wirelessly via independent transmission channels (see figs 2 and 9 and col. 4 line 27-col. 5 line 60, col. 8 line 53-col. 9 line 67 and col. 12 line 47-col. 13 line 67) as claimed. But Anderson may not explicitly teach a plurality of hearing devices as claimed

However, providing more than one hearing device for a wireless transmission system is well known in the art (the examiner is taking the official notice).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to be motivated to provide a sound hearing device for the system taught by Anderson as an attenuate device, in order to enhance the efficiency of the communication system.

Consider claims 23, 25 and 30 Anderson teaches the wireless transmission system the means for transmitting a plurality of audio signals consist of a single unit (see figs. 2 and

Art Unit: 2615

9); and the wireless transmission system further comprising a transmission unit containing the means for remotely generating and wirelessly transmitting the configuration parameters as well as the means for transmitting the plurality of audio signals (see figs 2 and 9 and col. 4 line 27-col. 5 line 60, col. 8 line 53-col. 9 line 67); and at least one of the hearing devices includes at least one hearing aid adapted to be worn by a user (see fig.2)(see the discussion above claim 21).

Claims 33, 35 and 40, they are essentially similar to claims 23, 25 and 30 and are rejected for the reason stated above apropos to claims 23, 25 and 30.

7. Claims 22, 28-29 and 32, 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US PAT. 5,721,783) in view of Laitinen (US PAT. 6,091,826).

Consider claim 22 Anderson teaches that the wireless transmission system, wherein the means for remotely generating and wirelessly transmitting the configuration parameters are provided in at least one of a remote control, a transmitter, a control unit connected to a antenna, and a configuration unit (see fig. 9 and col. 8 line 53-col. 9 line 67 and col. 12 line 47-col. 13 line 67); but Anderson fails to teach a loop antenna.

However, Laitinen teaches a loop antenna (see fig. 5 (59b, 60b) and see col. 9 line 15-29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Laitinen into the teaching of Anderson so that the weaker signals can be received too.

Consider claim 28 Laitinen teaches that wireless transmission system comprising a control unit that is, on one side, connected to a loop antenna and, on another side, connected to a input/computing unit (see fig.5 and col. 6 line 62-col. 7 line 67 and discussion above claim 22).

Consider claim 29 Anderson does not explicitly teach the input/computing unit is connected via a Universal Standard Bus to the control unit.

However, the input/computing unit being connected via a Universal Standard Bus to the control unit is well known in the art (official notice is taken).

Therefore, it would have been obvious that wireless remote processor system as taught by Anderson could have used a USB port as claimed so that more efficiency to transmitting the data for update the system.

Claims 32 and 38-39, they are essentially similar to claims 22 and 28-29 and are rejected for the reason stated above apropos to claims 22 and 28-29.

8. Claims 24 and 26-27 and 34, 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US PAT. 5,721,783) in view of Hagen (US PAT. 6,424,722).

Consider claim 24 Anderson does not explicitly teach the wireless transmission system, wherein the means for transmitting a plurality of audio signals consist of a plurality of units, each being able to transmit one audio signal.

However, Hagen teaches the wireless transmission system, wherein the means for transmitting a plurality of audio signals consist of a plurality of units, each being able to transmit one audio signal (see fig.9 and col. 14 lines 1-32).

Therefore, it would have been obvious that wireless remote processor system as taught by Anderson could have used a USB port as claimed so that more efficiency to transmitting the data for update the system.

Consider claim 26 Anderson teaches the wireless transmission system further comprising a configuration unit containing the means for remotely generating and wirelessly transmitting the configuration parameters, wherein the configuration unit is capable of establishing a bidirectional communication link to the means for receiving the configuration parameters at least one hearing device (see figs 2 and 9 and col. 4 line 27-col. 5 line 60, col. 8 line 53-col. 9 line 67 and col. 12 line 47-col. 13 line 67); but Anderson does not explicitly teach programming of at least one of the hearing devices.

However, Hagen teaches the wireless transmission system, further comprising a configuration unit containing the means for generating and transmitting the configuration parameters, wherein the configuration unit is capable of establishing a bidirectional communication link to the means for receiving the configuration parameters allowing programming of at least one of the hearing devices (see figs 9-10 and col. 14 line 1-col. 15 line 40).

Therefore, it would have been obvious that wireless remote processor system as taught by Anderson could have used a USB port as claimed so that more efficiency to transmitting the data for update the system.

Consider claim 27 Hagen teaches the wireless transmission system, further comprising a computer unit that is operationally connected to the configuration unit (see fig.1 and see col. 7 line 30-col. 8 line 20 and see the discussion above claim 26).

Claims 34 and 36-37, they are essentially similar to claims 24 and 26-27 and are rejected for the reason stated above apropos to claims 24 and 26-27.

Response to Arguments

9. Applicant's arguments with respect to claims 21-40 have been considered but are moot in view of the new ground(s) of rejection.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2615

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any response to this action should be mailed to:

Mail Stop ____ (explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Facsimile responses should be faxed to:
(571) 273-8300

Hand-delivered responses should be brought to:
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao,Lun-See whose telephone number is (571) 272-7501. The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian, can be reached on (571) 272-7848.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Lao,Lun-See
/LUN-SEE LAO/
Examiner, Art Unit 2615
Patent Examiner
US Patent and Trademark Office
Knox
571-272-7501
Date 08-13-2008

/HUYEN D. LE/
Primary Examiner, Art Unit 2615

